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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,873	11/20/2003	Daniel J. Falla	60665B	9382

109 7590 02/02/2006  
THE DOW CHEMICAL COMPANY  
INTELLECTUAL PROPERTY SECTION  
P. O. BOX 1967  
MIDLAND, MI 48641-1967

EXAMINER
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KRUER, KEVIN R

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 02/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/717,873

Applicant(s)

FALLA ET AL.

Examiner

Kevin R. Kruer

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 07 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1, 3-5, 10, 11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 1087801 (herein referred to as Sheller) in view of Burns (US 5,710,184).

Sheller teaches a cork gasket having improved coating (page 1, lines 10+). The coating lowers vapor transmission rate of the sealed fluid (page 1, line 25). The cork is coated with an emulsion of an acrylic-modified vinylidene chloride copolymer (page 1, lines 47+). The coating may further comprise a plasticizer in amounts of 1-0 wt% (page 2, lines 30+). Said coating is applied to the entire outer surface (page 1, lines 75+) of a cork (page 1, line 48+). The coating is applied by immersing or spray coating the cork, and drying the cork by heating in an oven (page 1, lines 85+).

With regard to the method limitations of claims 1, 7, 8, and 10 and the solvent of claims 11 and 13, the examiner takes the position that said limitations are method limitations. The courts have held that a method of making a product does not patentably distinguish a claimed product from a product taught in the prior art unless it can be shown that the method of making the product inherently results in a materially different product. In the present application, no such showing has been made. The solvent is understood to be a method limitation because it is evaporated away in the final product.

Sheller does not teach that the cork should comprise synthetic cork. However, Burns teaches that natural cork suffers with respect to color, drying, shrinkage, crumbling, sticking and cost (col 1, lines 30+). Burns teaches a molded closure comprising a thermoplastic elastomer and a blowing agent that may be used in place of cork (abstract). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the synthetic cork taught in Burns in place of the cork taught in Sheller. The motivation for doing so is that the synthetic cork has improved characteristics with regard to color, dimensional stability, crumbling, and cost.

3. Claims 2 and 9 are rejected under 35 USC 103(a) as being obvious over GB 1087801 (herein referred to as Sheller) in view of Burns (US 5,710,184), as applied to claims 1, 3-5, 10, 11 and 13, and further in view of WO96/28378 (herein referred to as Dewar).

Sheller in view of Burns is relied upon as above, but does not teach that only one surface of the cork should be coated. However, Dewar teaches a coated cork wherein the coating is applied only to a single face (page 3, lines 1+). Thus, it would have been obvious to only coat a single face of the cork taught by Sheller. The motivation for doing so would have been to reduce cost.

4. Claims 6-8 are rejected under 35 USC 103(a) as being obvious over GB 1087801 (herein referred to as Sheller) in view of Burns (US 5,710,184), as applied to claims 1, 3-5, 10, 11 and 13, and further in view of Naumovitz et al (US 5,002,989).

Sheller in view of Burns is relied upon as above, but neither reference teaches that amount of acrylic copolymer that should be incorporated into the vinylidene chloride

copolymer. However, Naumovitz teaches a vinylidene chloride copolymer with excellent barrier properties (col 1, lines 5+). Said copolymer comprises 4-10wt% alkyl acrylate (col 1, lines 61+). Said polymers have better processability while maintaining the desirable barrier properties of PVDC (col 7, lines 30+). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a copolymer comprising 4-10wt% alkyl acrylate as the copolymer taught in Sheller. The motivation for doing so would have been that such copolymers have improved processability while maintaining the desired barrier properties.

5. Claim 12 is rejected under 35 USC 103(a) as being obvious over GB 1087801 (herein referred to as Sheller) in view of Burns (US 5,710,184), as applied to claims 1, 3-5, 10, 11 and 13, and further in view of JP49113839A (herein referred to as Nippon)

Sheller does not teach the coating may comprise a thixotropic agent. However, Nippon teaches that silica is a known thixotropic agent for vinylidene chloride compositions (abstract). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the thixotropic agents taught in Nippon in the composition taught by Sheller. The motivation for doing so is that silica is a known thixotropic agent.

### ***Response to Arguments***

Applicant's arguments filed December 7, 2005 have been fully considered but are moot in view of the new grounds of rejection. In hopes of expediting prosecution, the examiner would like to take this opportunity to respond to applicant's arguments which may be relevant to the newly applied rejection.

Applicant argues Sheller is not applicable to the present invention because it relates to cork "placed between confronting faces of adjacent machines" not to corks for liquid containers. The examiner respectfully disagrees. Said disclosure is drawn to a cork gasket used to prevent the passage of vapor and/or fluid, which reads on the claimed "cork closure." With regard to the recited intended use in the preamble, MPEP 2111.02 states that a preamble is not considered a limitation and is of no significance to claim construction when the preamble merely states the purpose or intended use of the invention. Furthermore, the cork gasket taught in Sheller is interpreted to meet the preamble limitation "closure for a liquid container" because the gasket is capable of performing the intended used as recited in the preamble (see MPEP 2111.02).

Applicant further argues Sheller does not teach the use of a thixotropic agent or the claimed polymer of claim 6. Said arguments have been fully considered and addressed in the newly applied rejections.

Applicant further argues the "method limitations" of claims 1, 7, 8, and 10 do resulting a structurally different product. Specifically, Applicant argues the claimed composition was shown by microscopic examination to penetrate into the cork, thus resulting in a tightly adhered coating as compared with a coating that would not penetrate. The examiner initially notes that said evidence is not of record. The examiner further notes there is no evidence that a "coating that does not penetrate" is the closest prior art. Furthermore, Sheller teaches the use of a solvent. Specifically, the coating is described as an emulsion (page 2, lines 1+).

Applicant argues the teachings of the references are not rationally applicable to Applicant's claimed invention. Specifically, Applicant argues that Sheller is not logically applicable to the present invention because it is in a different field of art and addresses totally different problems than the current invention. The examiner respectfully disagrees for the reasons noted above.

Applicant further argues one skilled in the art of natural cork gaskets would not reasonably apply the teachings of Burns to solve the problems faced by natural gaskets. The examiner respectfully disagrees with applicant's conclusion that said difference make the combination non-obvious. As noted by Applicant, synthetic cork closures have been introduced in the field of endeavor to solve problems with natural corks closures. Thus, synthetic cork and natural cork closures are in the same field of endeavor. A prior art reference is analogous if the reference is in the field of applicant's endeavor or, if not, the reference is reasonably pertinent to the particular problem with which the inventor was concerned.

A third issue, according to applicant, is that there is not valid motivation to combine the teachings of Sheller and Burns. The examiner respectfully disagrees. The cork closure taught in Sheller reads on the use of said closure in any environment wherein cork is commonly used to seal fluids (col 1, lines 25). The most common area wherein corks are used to seal fluids is in the packaging of fluid materials. Thus, the examiner maintains the position that Sheller and Burns are in the same field of endeavor and that the closure of Sheller meets the preamble limitation of claim 1 for the reasons noted above.

The examiner further disagrees with applicant's position that there is no indication of success by combining the references. As noted by Applicant, synthetic cork closures have been introduced in the field of endeavor to solve problems with natural corks closures. Thus, the examiner maintains one of ordinary skill in the art would have expected success when making a substitution commonly made in the art.

For the reasons noted above, the claims are not patentable over the prior art.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin R. Kruer whose telephone number is 571-272-1510. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Kevin R. Kruer  
Patent Examiner-Art Unit 1773